PHILIPS

Philips Medical Systems DMC GmbH

SERVICE MANUAL

732

Subsystem

PCR AC500 / AC500 P

9848 600 02501 / 02502

Note:
For configuration see Release Bulletin PCR AC500

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SERVICE MANUAL – Subsystem
PCR AC500 / AC500 P
9848 600 02501 / 02502
732

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In case there are any questions concerning this manual,
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released: 11/2002

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3 …. 9	(02.1)	
INSTALLATION	009-053-07 PMS (02.0)	Fuji Photo Film Co., Ltd.

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1. Introduction and technical data

1.1. Abbreviation and acronyms

Abbreviation	Explanation
PCR	Philips Computed Radiography
RAD	Radiography
USIT	User Interface
USIT PC	Personal Computer of the User Interface
DICOM	Digital Imaging and Communication in Medicine

1.2. Introduction

This PCR system consists of the following components:
- Reader up to two in one cluster
- PCR User Terminal one server and up to seven clients in one cluster
- EasyVision RAD one server and up to two clients (workspots) in one cluster
- Monitor one or two per EasyVision

For each component are Subsystem and/ or Unit service manuals are available.
Software depending information e.g. installation of software and configuration is described in release bulletins.

The service manual of the reader contains information about all possibilities of use.
Important to know are the following things typically for the use of a reader in systems which are offered by Philips Medical Systems:
- The reader delivers the images in DICOM format to the EasyVision RAD via Ethernet.
- Patient and examination data will be delivered by the PCR User Terminal. This terminal is connected to the reader via a serial interface.
- Neither a printer nor an archive nor an original IDT (can be compared with the function of our PCR User Terminal) are connected directly to a reader.

The service manual of the reader contains:
- This system installation guide for a PCR system
- The detailed installation section of the reader
- A CD-ROM containing all needed sections in PDF format to install and repair a reader.
  The CD-ROM can also be read by the EasyVision RAD using the service menu PCR System.

Commercial and technical names:
AC500 = IR342
AC500 P = IR342 P

1.3. Compatibility

The Reader is compatible with:

Easy Vision RAD .....9896 050 0295x / 0296x
PCR Terminal Display 4512 201 0171x
PCR PC 4512 201 0139x

1.4. Technical data

See Planning Reference Book in the Intranet and section Machine Description on CD- ROM.

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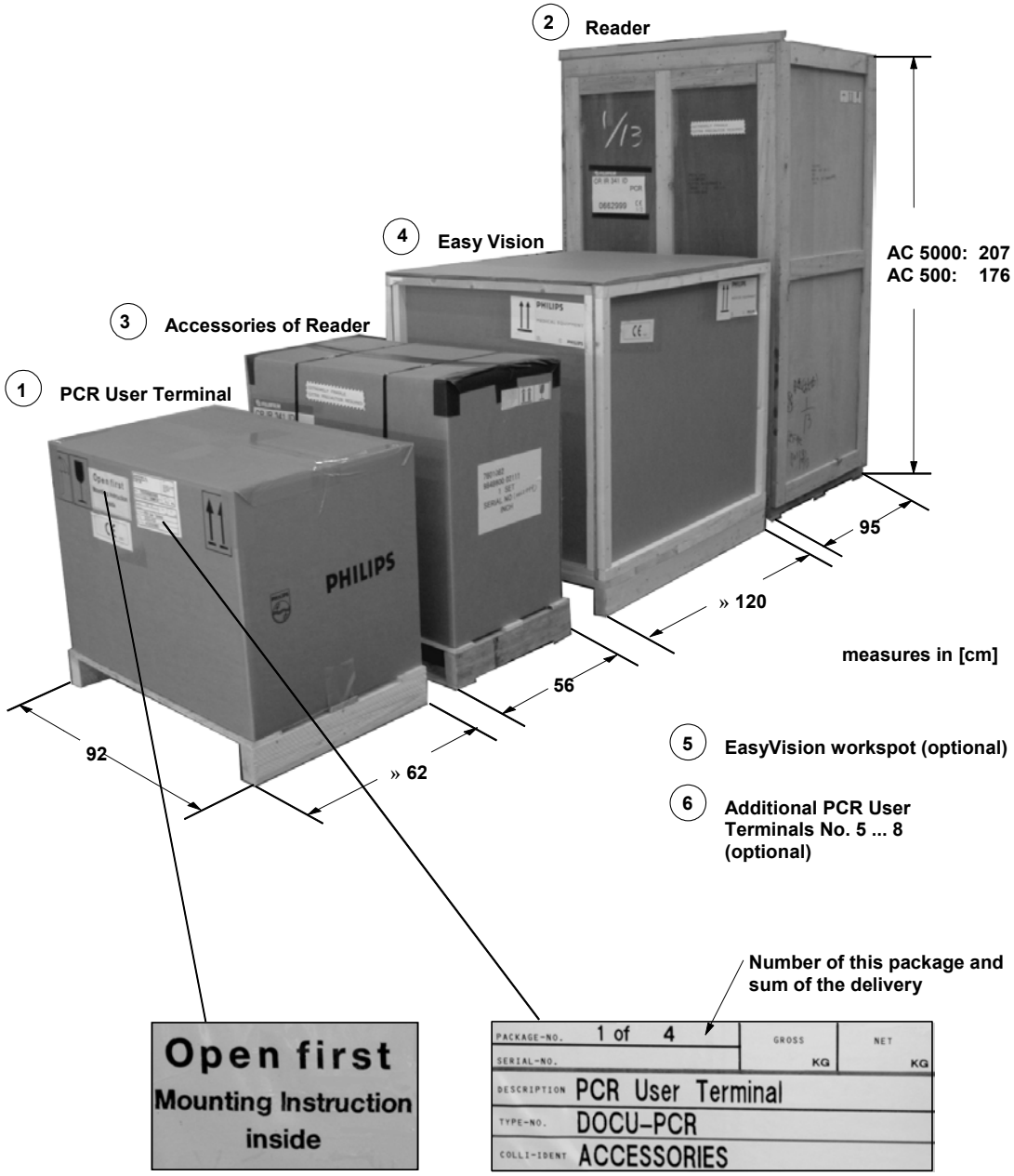
2. System Installation Guide

2.1. Package Check



Before the packages are opened, it is necessary to make a check on both the number of packages and their stated contents. As soon as the packages are opened, check the contents of each to make sure that all components and items required for the installation have been delivered. Any component or item that is not delivered must be reported immediately. The contents of each package must be checked against the Delivery Note to make sure that the delivery is correct.

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Installation to be carried out in the same order as the package items.

No.	Contents	Length	Width	Height	Gross weight	Net weight
1	PCR User Terminal	92 cm	62 cm	78 cm	56 kg	46 kg
	+ Service Documentation + CE Documentation + Cassettes / IPs + AC cord (for Reader) + Network (for Reader)	Measurements and weight vary depending on number of delivered PCR User Terminals				
2	Reader	115 cm	95 cm	176 cm	323 kg	223 kg
3	Accessories to Reader	95 cm	56 cm	94 cm	30 kg	20 kg
4	Easy Vision, e.g.	120 cm	100 cm	114 cm	108 kg	73 kg
	or	150 cm	88 cm	114 cm	120 kg	85 kg
		Measurements and weight may vary depending on scope of delivery				
6	Additional PCR User Terminals No. 5 ... 8 (optional)					

The marking corresponds to the marking of the colli.

2.2. Sequence of Installation and Setting-to-work

Advisable order to read and carry out the installation instructions.
Please open first the box containing the PCR User Terminals. There you will find the service documentation.

	Unpacking Set up	Cabling	Power on	Configu-ration	Final Inst.	Accept-ance	Customi-zation
PCR User Terminal 1 ... 4	1.	2.	2.	2.	—		3.
Reader	2.	1.	1.	1.	1.		—
Easy Vision	3.	3.	3.	3.	—		1.
Workspot (optional)	4.	4.	4.	4.	—		2.
PCR User Terminal 5 ... 8 (optional)	5.	2.	2.	2.	—		—

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2.3. Access to the Service Documentation

- Open the box labeled with 'Open me first'.
  It contains the service documentation and up to four PCR User Terminals.
- Unpack the PCR User Terminal(s) consisting of a PCR Terminal Display and a USIT PC.

2.4. Unpack the Reader

- Open the wooden crate. Be carefully with the top cover.
  It will be used later as a ramp to move down the reader from the pallet.
- Remove the four clamps mounted at the feet of the reader.
- Nail the top cover of the crate as a ramp onto the pallet on the rear side of the reader.
- Turn upwards the 4 adjustable feet.
- Move the reader from the pallet.

2.5. Remove the Security Material

- Remove all side covers of the reader.
- Remove all security material (tapes, tie raps and plastic foam blocks).
- Unclamp the Vertical Conveyor (two brackets). Park the brackets at both sides.
- Unclamp the Side Positioning Conveyor. Park the clamp in the left position.
- Pull out the scanner unit.
- There remove the retaining screws of the retaining brackets.
- Slide the brackets into a position and fix them so that the scanner unit can swing free on its rubber suspension.

2.6. Install the Units and PCBs

- Install the light- collecting guide assembly and connect it.
- Slide the scanner unit into its working position and fix it.
- Connect all plugs of the scanner unit.
- Switch on the HV on the SCN08 board.
- Install the erasure lamp assembly and connect it.
- Check all circuit breakers installed on the boards.
- Check the jumper setting of the CPU90E board, especially:
  S5 – in position STRAIGHT (if the network port will be used for remote service)
  S6 - in the right position (RS232)
  S2.1 - ON
  S2.2 - ON
- Install the one RAM card DIM08A on the motherboard.
- Install the CPU90F/ LAN90B board after checking the jumper setting of it.
- Install the HCP08A board.
- Check the programming of the addresses of the boards.
  IMG07B: 4
  HCP08A: 5
  CPU90F/LAN90B: 6
- Install the power cable of the reader.
- Set the mode switch of the power supply of the reader into position REMOTE.

2.7. Installation of the Other System Components

- Unpack and install the PCR User Terminal(s). See Subsystem manual of this unit.
- Make sure the USIT PCs are set to the right mains voltage.

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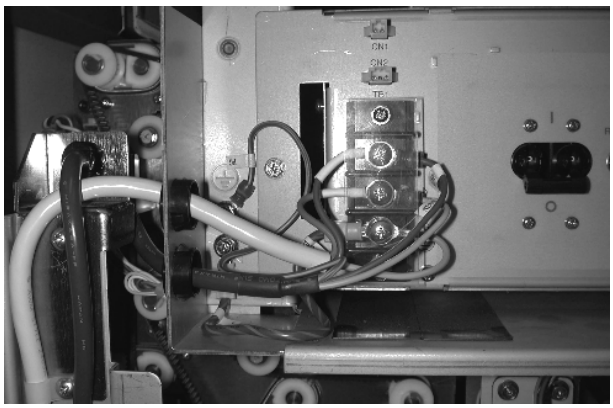
- Connect the power cable of the USIT PC.
  The server and reader USIT PC should be connected at the same phase of the mains supply the reader is connected to.
  For this a special power cable (15m long) is delivered with this type of USIT PC which can be connected to the power terminal of the reader →.



- Connect the serial interface cable at the server and reader USIT PC (COM1) and at the reader (IDT).
- Connect the network cable (STP) of the USIT PCs and the readers to the prepared network, at least to a small hub/ switch.
- Connect the barcode reader and the keyboard at the Terminal Display.
- Connect the PS/2 cable and the VGA cable to the Terminal Display and the USIT PC.
- Connect the power cable of the Terminal Display at the same phase the USIT PC is connected to.
- Unpack and install the EasyVison RAD (server and optional workspots) including the monitor(s).
  See corresponding manuals.
- Make sure the EasyVision is set to the right mains voltage.
- Establish the network connection of the EasyVision.
  Depending on the HW configuration there may be up to five ports.

2.8. Finishing the Installation Work at the Reader

- Install all covers of the reader.
- Move the reader to its planned position. Take care of the minimum distances to the walls.

2.9. Power On

- Switch on the circuit breaker at the left side of the reader.
- Switch on the reader.
- Switch on the EasyVision(s).
- Put the bootable CD containing the USIT software into the USIT PCs beginning with the server.
- Switch on the USIT PC.

2.10. SW Installation and Configuration

Note: The SW of the reader and of the EasyVision have been installed by the factory.

- Install the PCR User Terminal software. See release bulletin of the PCR User Terminal.
  Start with the server if more than one User Terminals are present.
- Configure the PCR User Terminal during the installation of the SW.
- Configure the EasyVision. See release bulletins of EasyVision.
- Configure the reader. See release bulletin of the reader.
- Make a backup of all configurations.
- Check the adjustment of the monitor of the Terminal Display in text (service) and graphic mode.
  For correction use the OSD menu PHASE and POSITION.

2.11. Detailed Installation Procedure of the Reader

The detailed installation of the reader is described in the next section.

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3. Programmings

Enter the network related information here. The programming of the units itself has to be executed according to the release bulletins.

	Room	System or Host ID	Host name	IP address	Netmask	DICOM AE Title
Example:						
Reader	X-ray 1	A	ac500f-a	172.16.0.1	255.255.255.0	ac500f-a
- CPU90 F/ LAN90B board			ac500e-a	172.16.0.2	255.255.255.0	-
- CPU90 E board (remote)			usit1	172.16.0.3	255.255.255.0	-
PCR User Terminal			ev1	172.16.0.4	255.255.255.0	ev1
EasyVision RAD	X-ray 2	80e66a69				
Reader A		A				
- CPU90 F/ LAN90B board		-	.....	___.___.___.___	___.___.___.___	.....
- CPU90 E board (remote)		-	.....	___.___.___.___	___.___.___.___	.....
Reader B		B				
- CPU90 F/ LAN90B board		-	.....	___.___.___.___	___.___.___.___	.....
- CPU90 E board (remote)		-	.....	___.___.___.___	___.___.___.___	.....
PCR User Terminal, Server		-		___.___.___.___	___.___.___.___	-
PCR User Terminal, Client 1		-		___.___.___.___	___.___.___.___	-
PCR User Terminal, Client 2		-		___.___.___.___	___.___.___.___	-
PCR User Terminal, Client 3		-		___.___.___.___	___.___.___.___	-
PCR User Terminal, Client 4		-		___.___.___.___	___.___.___.___	-
PCR User Terminal, Client 5		-		___.___.___.___	___.___.___.___	-
PCR User Terminal, Client 6		-		___.___.___.___	___.___.___.___	-
PCR User Terminal, Client 7		-		___.___.___.___	___.___.___.___	-
EasyVision RAD, Server				___.___.___.___	___.___.___.___	
EasyVision RAD, Client 1				___.___.___.___	___.___.___.___	
EasyVision RAD, Client 2				___.___.___.___	___.___.___.___	
Viewing:				___.___.___.___	___.___.___.___	
Printer:				___.___.___.___	___.___.___.___	
Archive:				___.___.___.___	___.___.___.___	
Router/ Bridge:				___.___.___.___	___.___.___.___	-

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